

IN THE CLAIMS

Please amend claims 1, 6-8, 10-12, 14, and 15 as follows:

1. (Amended) An analyser comprising:

a substrate of diamond, sapphire or a polymer material;

an array of elongate capillary channels formed in the substrate;

means for driving a sample to be tested along the channels whereby the velocities of components of the sample along the channels depend on the relative molecular weights of those components;

B/ a radiation source and a radiation detector array disposed on <sup>opposite</sup> ~~either~~ side of the channel array so as to simultaneously detect the presence of material in the channels as interruptions in the radiation path between the radiation source and the radiation detector array.

6. (Amended) An analyser according to claim 1, in which the channels are less than 200µm wide.

B/ 7. (Amended) An analyser according to claim 1, in which the channels are less than 100 µm wide.

8. (Amended) An analyser according to claim 1, in which the radiation source comprises an ultraviolet light source.

10. (Amended) An analyser according to claim 8, in which focusing formations are formed on the substrate to at least partially focus the ultraviolet light onto the interior of each channel.

11. (Amended) An analyser according to claim 10, in which the focusing formations, the channels and the radiation detector array are arranged so that the interior of each channel is substantially mid-way between the focusing formations and the radiation detector array.

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12. (Amended) An analyser according to claim 1, in which the substrate of diamond, sapphire or a polymer is formed on a further substrate of a semiconductor material, the radiation detector array being fabricated on the further substrate of semiconductor material.

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14. (Amended) An analyser according to claim 12, in which the radiation detector array comprises an array of pixel detectors formed on the further substrate.

15. (Amended) An analyser according to claim 1, in which the radiation detector array comprises an array of obscured regions on the substrate under the channels, and means for detecting an electric current formed by electron-hole pair generation at the obscured regions.